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ABSTRACT

Education in Singapore is centrally controlled by the Ministry of Education and is financed almost entirely by the government. Boys and girls have equal access to education, and most of the primary and secondary schools and junior colleges are coeducational. There is complete freedom of choice of language of instruction: Malay, Chinese, Tamil, or English. Channelling into practical courses is carried out at primary and secondary levels to enable less academically inclined pupils to become employable when they leave school. Since 1976, automatic promotion in primary school has been abolished. In its place there is now a system of regular grade level assessment for promotion or retention. Secondary education offers courses in technical, academic, and commercial fields. Teacher training requirements vary according to the level of teaching to be performed. Preservice training programs are required. Training abroad is available in Australia, New Zealand, Japan, Russia, England, and the United States. (Author/AV)

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36TH SESSION

OF THE

INTERNATIONAL CONFERENCE

ON EDUCATION

SINGAPORE NATIONAL REPORT

SØ 010 366

Part I Organisation and Structure of the education system

General principles

1 Basic legislation on education presently applicable (Constitutional provisions, basic laws, decrees, etc, governing the organisation of the education system).

2 Principles governing or defining the nature of the education system: free education? Compulsory education? Compulsory schooling? Between what ages and for how long? Equal access or selection? Equality of access for boys and girls, for minority groups, etc?

3 Provision in respect of co-education.

Answer:

1 The 1957 Education Act and the 1959 Statement on Education by the present Government, based on the 1956 All Party Report on Education, emphasised the equality of treatment for the four language streams of schooling in line with the four official languages of the Republic, namely, Malay, Chinese, Tamil and English, the learning of languages, mathematics, science and technical subjects. The learning of a second language and mathematics is made compulsory for all, while all boys in the first two years of secondary education must also learn technical subjects. Girls are allowed to choose between technical subjects and home economics.

2 Education, though not compulsory, is universal for all children of school-going age. The formal school system comprises 6 years' primary, 4 years' secondary and 2 years' junior college education. Formal schooling starts at the age of 6+ for pupils. Primary education is free for citizens. At the secondary and junior college levels pupils pay a nominal monthly fee of (Singapore) $4/= each. Equal provisions, facilities and opportunities have been accorded to the four language streams thus catering equally to the majority and minority races in the Republic. Equivalent standards are maintained in the education provided in the 4 languages to ensure equality of opportunities for mobility to higher education and employment.

3 The aim of the government is to provide a place in school for every child and this has been achieved. Boys and girls have equal access to education and most of the primary and secondary schools and junior colleges are co-educational institutions. There is complete freedom of choice of the language of education. In order to minimise educational wastage, early channelling to a more practical course is carried out at both the primary and the secondary level to enable the less academically inclined pupils to become employable when they leave school.

System of administration

1 Role of national, provincial (or district) and local authorities and advisory bodies concerned with education (including planning, inspection/supervision and research).

2 Their functions and relationships briefly described and/or shown in a diagram of the organisational structure of educational administration.

3 Mechanism of educational financing: total education budget for 1975/76 expressed as a percentage of the national budget and compared with preceding years.

Answer:

1 Singapore being a small city state, education is centrally controlled by the Ministry of Education. There is no provincial or local or advisory body concerned with education other than statutory bodies set up by the Ministry of Education.

The Director of Planning and Review coordinates all planning activities of the Ministry and provides the necessary support for educational changes both in planning, coordinating problem-centred action research and providing educational data pertaining to the education system.

The Schools Division inspects and supervises the implementation of educational policies and the day to day running of the schools.

2 There are six divisions in the Ministry of Education catering to all professional and administrative matters pertaining to education. They are: the General Administration Division, the Finance Division, the Personnel Division, the Planning and Review Division, the Schools Division, the Services Division and the Development Division.

3 Education in Singapore is financed almost entirely by the Government of Singapore. While there are voluntary contributions from private sources, these contributions are relatively small.

Government-Aided Schools receive grants according to pupil enrolment and staff requirement to meet recurrent costs.

The University of Singapore, the Nanyang University, the Singapore Polytechnic, the Ngee Ann Technical College, the Institute of Education, the Industrial Training Board and the Adult Education Board receive annual grants which finance capital development as well as recurrent cost. Funds from other sources are comparatively small. The total budget for education for the fiscal year 1973-74, 1974-75, 1975-76, 1976-77 are as follows:

Year	Ordinary Estimates	Percentage of National Budget	Development Estimates	% of National Budget
1973/74	$201,511,519	12.76	$ 8,785,869	1.32
1974/75	$256,445,341	12.16	$ 9,786,459	0.88
1975/76	$299,181,900	13.1	$45,075,300	1.17
1976/77	$355,929,350	13.45	$92,096,800	4.2

Structure and organisation

1 Brief description and a diagram of the general education system from pre-primary to higher, showing options, streams, links with vocational and technical education.

2 Number of years in each stage and qualifications obtained on completing it. Promotion practices and examinations.

3 Dates of beginning and end of school year at each level.

Answer:

1 The education system in Singapore covers pre-school, primary, secondary, junior college, tertiary and adult education. Pre-school education and education for handicapped children are provided by government agencies and private organisations. Primary and secondary education is available in any of the four official languages. Government schools are either integrated with pupils and teachers of two or three language streams working in a given school or schools with only one language stream as is the case with most government-aided schools. Primary and secondary schools are run on a two-session system with one set of pupils and teachers using the premises in the morning and another set in the afternoon. However, the curriculum is uniform in all schools.

2 Primary education of six to nine years' duration begins at the age of six and leads to the Primary School Leaving Examination. From 1976 new features have been incorporated into the system. Automatic promotion has been abolished and in its place there is now the system of regular grade level assessments for promotion and retention. There is a new emphasis on streaming and remedial teaching. Other features are the introduction of a Basic Course of work-oriented primary education for less-academically inclined pupils and the establishment of a Junior Trainee Scheme whereby pupils who have completed the Basic Course are apprenticed to industry for training over a period of 3 years.

Secondary education offers four-year courses with a technical, academic or commercial bias leading to the General Certificate of Education Ordinary Level Examination. After completing the second year, pupils can either proceed to complete their secondary school course in the technical, academic or commercial streams or join vocational institutes.

A two-year Junior College course with an arts, science, commercial or technical bias leading to the General Certificate of Education Advanced Level Examination is available.

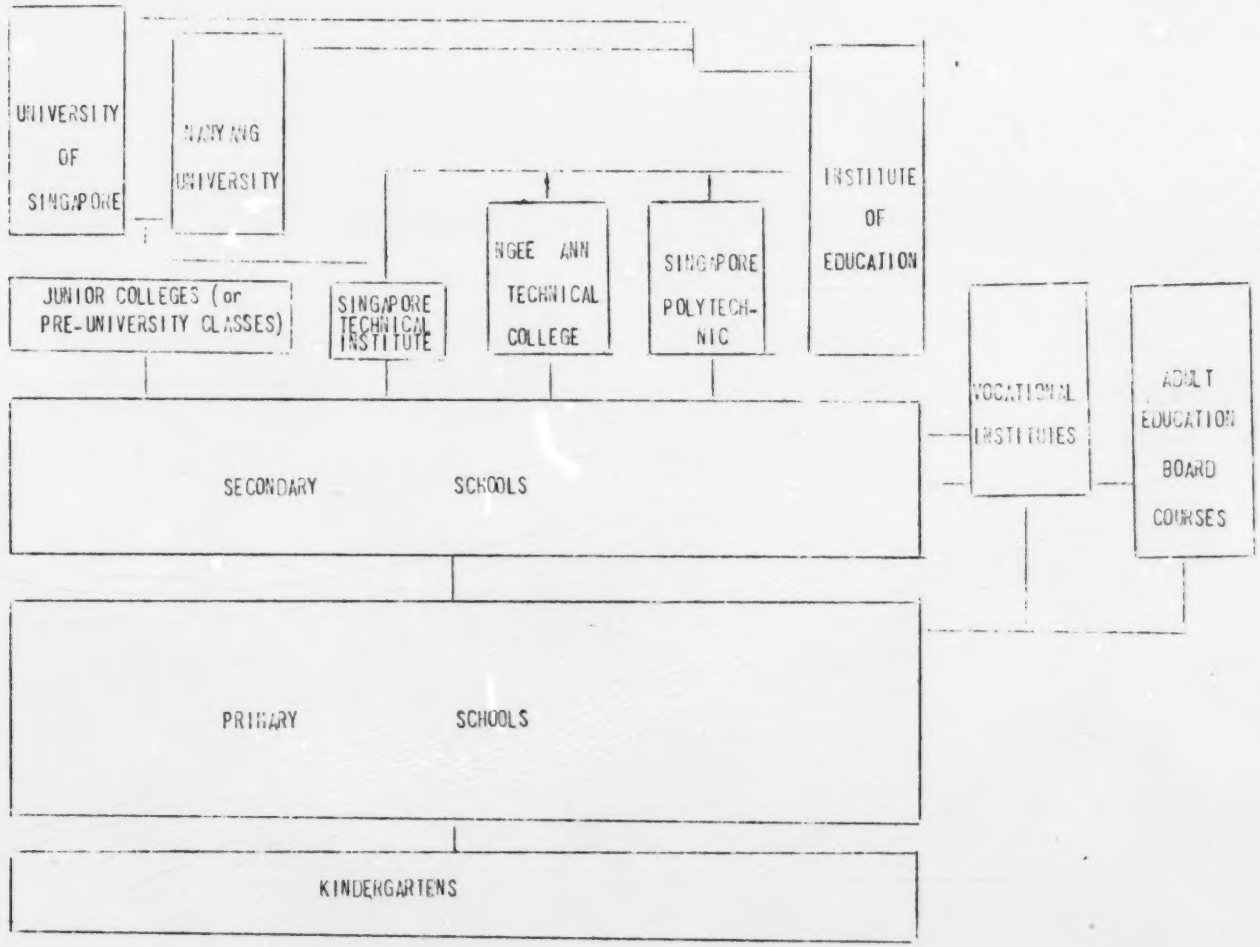
In addition, there are a number of vocational institutes under the Industrial Training Board (ITB) providing training in a wide range of technical subjects. The educational requirements for entry to these institutes vary according to the courses applied for. The Adult Education Board (AEB) also runs courses for pupils who have been found unable to cope with the standard general education course in schools. These AEB courses are work-oriented ones, such as dress-making, typing, book-keeping, etc.

Technical education and industrial training are available at the Singapore Polytechnic and the Ngee Ann Technical College. Tertiary education is available at the Institute of Education, the Nanyang University and the University of Singapore which award degrees or diplomas.

3 School and academic terms in the various institutions are as follows:

Schools	:	Jan - Nov
Industrial Training Institutions	:	Jan - Dec
Institute of Education	:	Jan - Nov
Ngee Ann Technical College	:	May - Mar
Singapore Polytechnic	:	Jun - Apr
Nanyang University University of Singapore	:	Jul - Mar

THE SINGAPORE EDUCATIONAL SYSTEM



Curricula

1 Mechanism of curricula preparation and development (nationally? regionally? locally?)

2 Basic subjects taught, compulsory and optional, at each level. (Time-table distribution in tabular form, if available, to be annexed).

Answer:

1 The Curriculum Development Committee (CDC) is responsible for all curricular matters in Singapore, and it comes directly under the control of the Director of Education. Under the Curriculum Development Committee there are eighteen subject standing committees working independently in their subject areas, and each has working committees under its ambit to develop curricula reflecting the objectives as formulated by the CDC and Subject Standing Committee.

The members of the standing and working committees are drawn from the Universities, the Institute of Education, Secondary and Primary Schools. Hence the preparation and development of the curricula in Singapore is centralised. The curricula developed for the primary and the secondary schools are therefore common national curricula which all schools will implement. In addition, separate curricula are provided for the Basic Course at the primary level, the ITB and the AEB courses at the secondary level.

2 Primary Schools

The weekly exposure time for primary schools ranges from 21 to 24 hours. At the primary level, the following subjects are taught:-

First Language (Malay/Chinese/Tamil/English)
Second " (- do -)
Mathematics
Science
Education For Living
Health Education
Art & Crafts
Music
Assembly

Of these, first and second languages, Mathematics and Science are compulsory examination subjects.

The Basic Course Curriculum

The following are subjects for Basic Course pupils:-

First Language
Second Language (only spoken)
Arithmetic
Physical Education
Music
Health Education
Civics and Moral Education
Handicraft/Workshop/Handwork/Domestic Science
Work Ethics/Work Safety
Assembly

Basic Course pupils are part and parcel of the primary school system. At the end of the course they will be channelled into the Junior Trainee Scheme instead of pursuing the regular secondary school course.

Secondary Schools

The curriculum time ranges from 25 to 25½ hours. Pupils in the first two years follow a common curriculum (Appendix A) and in the next two years may opt for an Arts-biased, a Science-biased, a Commercial-biased or a Technical-biased course (Appendix B). At the end of the 4 year secondary course, pupils will sit for the General Certificate of Education 'O' Level Examination.

APPENDIX A

The Curriculum for Secondary I & II

Subjects:

First Language and Literature
Second Language
Mathematics
General Science
History & Geography
Art & Crafts
National Language
Physical Education
Civics
Music/Singing
Assembly
Technical Subjects (Metal work)
(Woodwork)

*Home Economics

*Girls offering Home Economics will not do Technical Subjects.

SECONDARY III AND IV CURRICULA

Appendix B

Technical Stream			Non-Technical Stream		
Subjects	Periods per week	Remarks	Subjects	Periods per week	Remarks
A Compulsory Examination Subjects	26		A Compulsory Examination Subjects	26	
1 First Language			1 First Language		
2 Second Language			2 Second Language		
3 Elementary Mathematics			3 Elementary Mathematics		
4 Physical Science			4 A Science subject or Home Economics		
5 Technical Drawing			5 Literature or History or Geography		
B Compulsory Non-Examination Subjects			B Compulsory Non-Examination Subjects		
1 Civics/Current Affairs	2		1 Civics/Current Affairs	2	
2 Physical Education	2		2 Physical Education	2	
3 Assembly Talks	1		3 Assembly Talks	1	
4 Music Appreciation/Singing	1		4 Music Appreciation/Singing	1	
C Elective Examination Subjects Choose 1 or 2	9	Special approval required for 3 electives.	C Elective Examination Subjects Choose 1 or 2	9	Special approval required for 3 electives. Not more than 2 Science subjects (including A4) for any student.
1 Additional Mathematics		C2 may not be taken with C3.	1 Additional Mathematics		
2 Biology			2 Biology		
3 Human and Social Biology		One of C4, C5 and C6 must be taken.	3 Human and Social Biology		
4 Woodwork			4 Physical Science		
5 Metalwork			5 General Science		C2 may not be taken with C3.
6 Basic Electricity and Electronics			6 Literature		
7 Literature or History or Geography			7 Geography		
			8 History		C4 may not be taken with C5.
			9 Art and Crafts		
			10 Needlework and Dressmaking		
			11 Cookery		C13 may not be taken with C14.
			12 General Housecraft		
			13 Commercial Studies		
			14 Commerce		
			15 Principles of Accounts		
			16 Music		
			17 Bible Knowledge		C17 may not be taken with C18.
			18 Islamic Religious Knowledge		
Total	41		Total	41	

Teacher Education

1 Every requirement for teacher education.

2 Types of teacher education institutions.

3 Level of training of various categories of teachers.

4 Length of basic content of training.

5 Provisions and possibilities for in-service training.

Answer:

1 In Singapore, teacher education is an on-going process for teachers for well-over 50 years now. Teachers are expected to undergo a specific period of pre-service training programme and are encouraged afterwards to participate in various in-service courses. While pre-service training is entirely the responsibility of the Institute of Education, in-service programmes are mounted by both the Ministry Headquarters and the Institute.

2 The former Teachers' Training College, established in 1950, centralised all teacher training and teacher education in Singapore. In 1973, the Institute of Education replaced the former TTC. It is responsible for the pre-service training of primary and secondary school teachers in all the four language streams, for the continuing education of qualified practising teachers, for the preparation of university graduates for the Diploma in Education, and the degrees of M Ed and Ph D in Education awarded by the University of Singapore.

3 Entry qualifications, duration of training and teaching levels for various categories of teachers are shown below:-

Course	Entry qualification	Duration of* Training	Teaching Level
Certificate in Edun	Suitable GCE 'A' Level Certificate	2 years full-time	Primary and Lower Secondary
Advanced Certificate in Edun	Suitable GCE 'A' Level Certificate or its equivalent plus teaching experience in relevant subjects	2 years part-time	Secondary
Diploma in Edun	University degree with relevant subjects	1 year full-time	Secondary and Junior College

* The duration for teaching cadets is 50% longer. All the courses consist of professional, academic and personal growth components.

4 The length of the basic training for teachers vary from one to two years.

5 In-service training programmes for practising qualified teachers are provided by both the Ministry of Education Headquarters and the Institute of Education. Teachers are brought up to date with the new developments in their teaching subjects, both in terms of content and methodology. Professional advancement of administrators are by no means neglected. Training courses and workshops have been mounted for school principals, senior assistants and Ministry officers.

Training opportunities in various regional centres were, as before, put to good use. HQ officers, principals and teachers were selected for specialized training at the Regional Language Centre (RELC, in Singapore), the Regional Centre for Educational Innovation and Technology (INNOTECH, in the Philippines), and the Regional Centre for Education in Science and Mathematics (RECSAM, in Malaysia). In addition, teachers and officers had the opportunities to obtain further training abroad, in Australia, New Zealand, Japan, UK, USA and USSR, among others. Such training took the form of extended formal courses lasting one to two academic years leading to professional diplomas and higher degrees as well as brief attachment of three to six months at various educational institutions.

Part II Development of Education in 1974-76

1 New Policy orientations

New orientations of your present educational policy with regard to aims and objectives, structure and content of education, both formal and non-formal.

Answer:

1 The new orientations of Singapore's educational policy are towards minimising educational wastage and achieving greater co-ordination between education and manpower needs. This has entailed a shift of emphasis by highlighting the importance of occupational preparation of youth according to ability and aptitude.

The top priority area is primary education, particularly the development of a Basic Course for less-academically inclined pupils, which emphasizes literacy, numeracy, basic work skills and attitudes. At the end of the course, pupils are placed in employment to gain work experience while continuing with general education on a day-release basis. Similarly, at the secondary level, pupils who are found unable to cope with the standard general education course are channelled to the ITE institutes or the AEB classes. The aim is to teach them a serviceable skill or trade.

2 New educational legislative measures

Please comment on the legal measures taken during the last two years that affect the organisation of education in your country. List the main official documents - in one of the Unesco working languages - and attach to the report as an annex.

Answer:

In the last two years there was no major legal measure taken on education.

3 Administration and financing

Please report any notable developments and changes in educational administration, educational planning and in the mechanism of educational financing in the event you feel they will add to the understanding of the brief description of these points provided in the first part of the report.

Answer:

There was no major development in the period under review.

4 Development of the system

a Give information about changes and developments (along with some indication of quantitative growth) in respect of the types of education (general, vocational, technical) and the levels of education (pre-primary, primary, secondary, post-secondary, higher) as well as for pre-service and in-service teacher education.

b Development of non-formal education and other educational programmes for youth and adults.

c If any global or partial educational reforms have been undertaken, or significant educational innovations introduced, please outline the concept of the reform or innovation and report on the stage of its implementation.

Answer

a There are no major changes or developments during this period. The effectiveness of the family planning programme over the last decade is seen in the stability of pupil enrolment in the school system. Enrolment over the last 3 years has been stable in kindergartens, primary schools, secondary schools and junior colleges. Despite this stability, about 20 new schools were built during the period under review and another 20 schools are planned for the immediate future in order to cater to population shifts and to replace old, unserviceable buildings. School facilities are continuously being improved.

In the sphere of teacher training entrance requirements for pre-service training have been raised to ensure recruitment of better qualified teachers into the profession. Massive in-service education programmes have been launched during the last 3 years with a view to upgrade the professional competence of existing teachers in service. In fact the accent has been more on the qualitative aspects of education over the last few years.

b Non-formal education and other educational programmes for youth and adults continue to be provided by agencies like the Adult Education Board, the People's Association, the Extra Mural Studies Department of the University of Singapore and other organisations.

c Basically little change has been made to the structure of and the policies underlying the education system. The 6-4-2 school system with equal provisions of facilities and standards continues to be operational. Effective bilingualism continues to be a significant policy.

Notable changes during the period have been mainly in the direction of checking educational wastage and ensuring that all pupils manage to acquire a fair level of proficiency in at least one language. The automatic promotion policy previously practised in the primary schools has been reviewed; and presently, movement to the next grade is allowed only after ensuring that pupils have attained certain minimum standards for the grade - thus ensuring minimum educational wastage. Pupils who are retained more than twice in the primary system are presently channelled to a new basic course programme. The basic course programme ensures that these less academically inclined pupils are given opportunities to attain a fair level of proficiency in their main language and in arithmetic and to acquire basic skills to take up employment in the industries. In order that these young pupils can develop their skills through on-the-job participation in the industries, a Junior Trainee Scheme has been introduced through which pupils leaving the school system after completing the basic course are channelled to the industries.

5 Educational research and information services

a Please report on further progress achieved in the organisation and financing of educational research, its principal fields, and the implementation of the findings.

b Development of educational documentation and information services, centres, institutions.

Answer:

a The importance of empirical data in planning and reviewing educational practices has always been given due cognizance in Singapore. There is an ever growing interest in and desire for educational research, especially those of the action-oriented genre. At the Ministry of Education Headquarters, studies have been carried out to secure information that illuminates various professional and administrative problems. Findings of these studies are used to plan new projects and evaluate

existing practices. Basic research is by no means neglected. At the Institute of Education, several research projects are well under way. Besides, research projects in specialised fields are being undertaken by students of higher degrees in Education.

b In the period under review, the Ministry of Education continued to operate as the national centre of education information. Moreover, the Institute of Education, the Industrial Training Board, the Adult Education Board, the University of Singapore, the Nanyang University, the Singapore Polytechnic, the Ngee Ann Technical College, the Civil Service Staff Development Institute, the National Library, and the National Statistical Commission all made important contribution in this regard.

With the increased recognition of the importance of education information within the Ministry of Education, a new Division, the Planning and Review Division was set up in 1976. This new Division is charged with the responsibility of the collection, documentation, and dissemination of education information.

6 Documentary references (in the form of annexes)

a List of main legislative and regulating documents on education (1974-1976).

b List of main official publications relating to education and issued during 1974/75 and 1975/76.

Answer:

a List of main legislative and regulating documents on education (1974-76)

There were no major legislative and regulating documents on education enacted in the period under review.

b List of main official Publications relating to education and issued during 1974/75 and 1975/76

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